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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR   | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|---|-------------|------------------------|----------------------------|------------------------|
| 10/594,051  | 11/13/2006  | Klaus Richard Pawelzik | 51436.0000                 | 8960                   |
| 27101   | 7590        | 02/01/2011             |                            |                        |
| PATENT GROUP<br>MACDONALD, ILLIG, JONES & BRITTON LLP<br>100 STATE STREET<br>SUITE 700<br>ERIE, PA 16507-1459 |             |                        | EXAMINER<br>BAYS, PAMELA M |                        |
|   |             |                        | ART UNIT<br>3766           | PAPER NUMBER           |
|   |             |                        | MAIL DATE<br>02/01/2011    | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/594,051

## Applicant(s)

PAWELZIK ET AL.

## Examiner

Pamela M. Bays

## Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 10-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4 November 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. This Office Action is responsive to the amendment filed on 4 November 2010. As directed by the amendment: Claims 1, 3, and 9 have been amended, and no claims have been cancelled or added. Claims 10-27 have been previously withdrawn due to a restriction requirement. Thus, Claims 1-9 are presently pending in this application.
2. The Amendments to the Drawings have been accepted by the Examiner.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. ***Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haller et al (US Publication No. 2002/0082665).***

5. Regarding Claim 1, Haller et al discloses a device for implantation in a living being for detecting electrical bioactivity (Abstract) comprising: two measuring electrodes (20, 21, 28, 29, Fig. 2, Paragraph 0048) measuring voltage representing bioactivity of tissue of the living being (Paragraph 0048, 0056); a wireless transmitter-adapted to transmit information outside the tissue (Paragraph 0008, 0024, 0051), the information relating to the bioactivity as represented by the voltage detected by said two measuring electrodes (Paragraph 0048); a wireless energy receiver adapted to receive energy from outside the tissue to supply said transmitter with electrical energy (Abstract,

Paragraphs 0024, 0031), said transmitter and said energy receiver operating in parallel in time (Paragraphs 0024, 0031); and a voltage sensitive switch connected between said two measuring electrodes and said transmitter (Paragraphs 0067, 0070, 0080), said voltage sensitive switch being positioned for switching said transmitter such that information relating to changes in bioactivity voltage is coded in analog fashion in the form of a change of at least one transmission property of said transmitter (Paragraphs 0067, 0070, 0080), and information relating to the identity of said transmitter is coded in analog fashion in the form of at least one transmission property of said transmitter (Paragraph 0008, 0024, 0051, 0084-85). Haller et al does not specifically disclose that the voltage measured is a voltage difference between the two electrodes. However, measuring voltage as a difference or drop between two measuring electrodes is well known in the art (for example, see US Patent No. 5,800,468, Abstract). It would have been obvious to one having ordinary skill in the art at the time of the invention to measure the voltage difference across the tissue using the two electrodes, as disclosed by Haller et al).

6. Regarding Claim 2, Haller et al discloses a system further wherein the at least one transmission property of said transmitter is a transmit frequency (Paragraphs 0051, 0084-85, 0102) .

7. Regarding Claim 2, Haller et al discloses a system further wherein said switch being configured such that said switch switches said transmitter to an on condition or an off condition when the detected voltage difference overshoots or undershoots a voltage threshold value which is fixed in advance (Paragraphs 0067, 0070, 0080).

8. Regarding Claims 4-8, Haller et al discloses all of the claimed elements as described above, except wherein said transmitter comprises a closed resonant circuit, a photodiode, an LED, a quantum well structure, or a quantum line structure. However, the Examiner is taking Official Notice that these transmission means are well-known in the art, and each has advantages and disadvantages. As previously cited examples, Patent No. 4,541,431 discloses a closed resonant circuit transmission means (Col. 2, Lines 35-50), Patent No. 4,677,982 discloses a photodiode transmission means (Col. 2, Lines 14-25), Patent No. 4,495,384 discloses an LED transmission means (Col. 7, Lines 15-30), Patent No. 6,248,069 discloses a quantum well structure transmission means (Abstract), and US Publication No. 2002/0186727 discloses a quantum line structure transmission means (Paragraph 0044). It would have been obvious to one having ordinary skill in the art at the time of the invention to use any of these transmitters/transmission means to transmit signal data in the device disclosed by Haller et al.

**9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haller et al in view of Hochmair et al (US Patent No. 4,357,497, previously cited).**

10. Regarding Claim 9, Haller et al discloses using transmission identifiers to identify a particular transmitter or device (Paragraph 0176, 0191), but does not specifically disclose comprising at least two transmitters that can be distinguished on the basis of different transmission properties. However, Hochmair et al discloses an implantable device with multiple transmitters operating on different channels to transmit data to an external receiver (Abstract, Channels 1, 2, etc, Fig. 10). It would have been obvious to

one having ordinary skill in the art at the time of the invention to use multiple transmitters operating on different channels as taught by Hochmair et al in the implantable device disclosed by Haller et al in order to simultaneously transmit data with different information from different areas.

***Response to Arguments***

11. The previous Objections to the Drawings have been withdrawn due to the submission of new drawings.
12. The previous 35 USC 112 rejections have been withdrawn due to the Applicant's amendments/arguments.
13. Applicant's arguments with respect to Claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela M. Bays whose telephone number is (571)270-7852. The examiner can normally be reached on Monday-Friday, 10:30am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl H. Layno can be reached on (571)272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carl H. Layno/  
Supervisory Patent Examiner, Art Unit 3766

/P. B./  
Examiner, Art Unit 3766